



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,003	03/26/2004	Donald Ray Bush	20040/56-11508	7748

34431 7590 12/14/2006

HANLEY, FLIGHT & ZIMMERMAN, LLC  
150 S. WACKER DRIVE  
SUITE 2100  
CHICAGO, IL 60606

EXAMINER

HOOK, JAMES F

ART UNIT	PAPER NUMBER
3754	

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/810,003	Applicant(s) BUSH ET AL.	
	Examiner James F. Hook	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7-2-04; 8-11-05</u> | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-14, 17-22, 25, 27, 30-35, 38, and 40 are rejected under 35

U.S.C. 102(b) as being clearly anticipated by Brighton.

Claims 1-3, 6-14, 17, 19-22, 25, 27, 30, 32-35, 38, and 40 are rejected under 35

U.S.C. 102(b) as being clearly anticipated by Schnall.

Claims 1-5, 7-14, 17, 19-23, 25-27, 30, 32-36, and 38-40 are rejected under 35

U.S.C. 102(b) as being clearly anticipated by Holter (DE 2514879).

Claims 1, 17, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Crane (DE 2641761).

Claims 1, 17, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by White (GB 2057637).

Claims 1, 17, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Parola.

Claims 1-3, 5-25, 27-38, and 40-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Paetzel. The patent to Paetzel discloses the recited fluid pressure reduction device comprising at least a first cylinder 4.1-4.3 having a plurality of apertures and surfaces, at least one second cylinder 5.1-5.3 press fit inside of the first

Art Unit: 3754

cylinder having a plurality of apertures and surfaces, the apertures are formed as a plurality of slots which overlap from cylinder to cylinder to create torturous paths for fluids through the device, cylinders 4.1-4.3 are fixed with respect to one another as are 5.1-5.3 however the group 4 cylinders are movable with respect to group 5 cylinders, various different materials can be used to form the cylinders, at least one of the cylinders inherently is associated with a pressure reduction stage as this is what the apparatus is used for, the cylinders are frictionally engaged with one another, substantial portions of their surfaces are in contact with one another, cylinders 4 are fixed to the housing 1, such is used for gas or liquid systems, at least some of the first plurality of apertures and second plurality of apertures function as plenums inherently with respect to an inlet or outlet, there is at least radial flow associated with the plenums, with respect to claims 15, 16, 28, 29, 41, and 42, such set forth method steps in an article claim and it is considered that such would not provide any further definition of the final structure when it does not matter what method was used to form the apparatus in an apparatus claim when there is no clear physical difference provided by using any one method over another to achieve the final apparatus therefore such limitations do not place any patentable weight on the final apparatus claimed, and the plurality of each type of cylinder, 4.1-4.3 and 5.1-5.3 discloses plurality of cylinders as required by the other independent claims.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3754

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4, 26, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paetzel. The patent to Paetzel discloses all of the recited structure with the exception of forming the cylinders of different materials, however it is disclosed that different materials can be used to make the cylinders, therefore it is considered merely a choice of mechanical expedients to use different materials to make the cylinders as such would only require routine experimentation to arrive at an optimum material for use with whatever material the apparatus was designed to be used with. It would have been obvious to one skilled in the art to vary the materials of the cylinders to meet the needs of the user where such is merely a choice of mechanical expedients and would require only routine experimentation to arrive at optimum materials to be used based upon the material the apparatus is to be utilized with.

### ***Conclusion***

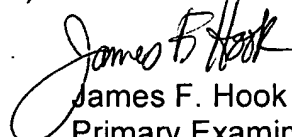
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references to Self, Bates, and Tartaglia disclosing state of the art cylindrical restrictors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

Art Unit: 3754

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
James F. Hook  
Primary Examiner  
Art Unit 3754

JFH